DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018603 Address: 333 Burma Road **Date Inspected:** 09-Dec-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG Segment**

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. M. Manikandan was present during the time noted above for observations relative to the work being performed.

OBG # TRIAL ASSEMBLY YARD (11EW-12AW)

This QA Inspector along with QA Inspector Mr.Manjunath S Math performed the dimensional survey inspection to verify the root gap and offset on the transverse splice weld of segment 11EW and segment 12AW. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 11EW to Segment 12AW – PP 108 to PP 109

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD (11EE-12AE)

The QA Inspector observed the heat straightening operation on WT stiffeners. The location was the hold back of WT stiffener fillet weld of segment 11EE and 12AE. The heat straightening was performed against heat straightening report HSR1 (B)-9934 Rev.0 dated 6th Dec. 2010. The heat straightening operation appeared to be in general compliance with the contract specifications. The weld designations reviewed are as follows: SP3002-001-022 to 035

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SP3003-001-018 to 029 SP3004-001-005 to 016 BP3001-001-043 to 054 BP3002-001-043 to 054 SP3013-001-001 to 012 SP3014-001-001 to 012 SP3015-001-001 to 012

OBG # TRIAL ASSEMBLY YARD (11EW)

The QA Inspector observed the welding operation per the SMAW process on base metal in the (4G) overhead position on side and bottom panel. The location were the base metal damaged on skin plates from welding fixtures removal near complete joint penetration groove weld joining the bottom and side panel of segment 11EW. The welder ID was 057333. The welding was performed against critical welding repair report B-CWR1842. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-4G (4F)-FCM-Repair-1.

OBG # TRIAL ASSEMBLY YARD (12AW)

The QA Inspector observed the welding operation per the SMAW process on base metal in the (4G) overhead position on side and bottom panel. The location were the base metal damaged on skin plates from welding fixtures removal near complete joint penetration groove weld joining the bottom and side panel of segment 12AW. The welder ID was 057333. The welding was performed against critical welding repair report B-CWR2126. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-4G (4F)-FCM-Repair-1.

OBG # TRIAL ASSEMBLY YARD (11EE-12AE)

The QA Inspector observed the welding operation per the FCAW process on weld joint no. 013 in the (4F) overhead position on deck panel 'I' stiffener piece mark no. DP708-001. The location was the hold back of 'I' stiffener fillet weld of segment 11EE. The welder ID was 040320. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-T-4114-1.

The QA Inspector observed the welding operation per the FCAW process on weld joint no. 012 in the (4F) overhead position on deck panel 'I' stiffener piece mark no. DP3001-001. The location was the hold back of 'I' stiffener fillet weld of segment 12AE. The welder ID was 040320. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-T-4114-1. For additional information please reference the pictures below:

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Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Manikandan, Murugan	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer